UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,713	05/17/2005	Ri-Cheng Chian	S&B-0005	4884

23377 7590 10/04/2007

WOODCOCK WASHBURN LLP
CIRA CENTRE, 12TH FLOOR
2929 ARCH STREET
PHILADELPHIA, PA 19104-2891

EXAMINER	
GOUGH, TIFFANY MAUREEN	
ART UNIT	**PAPER NUMBER**
1657	
MAIL DATE	**DELIVERY MODE**
10/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/506,713	CHIAN, RI-CHENG	
	Examiner	Art Unit	
	Tiffany M. Gough	1657	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 August 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *See Continuation Sheet*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :8/31 and 9/30/2005 and 7/3/2006.

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of claims 1-38 in the reply filed on 08/29/2007 is acknowledged.

Claims 39-68 were cancelled by applicant.

Claims 1-38 have been considered on the merits.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7 and the therefore dependent claims, 8-25, and claims 27-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are indefinite because they claim oocytes and a culture medium which is "essentially free of..." It is unclear what "essentially free" is and to what degree or in up to what amount the medium and oocytes would be considered "essentially free of..."

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6,26-33,38 are rejected under 35 U.S.C. 102(b) as being anticipated by Chian et al., Fertility and Sterility, 1999, p.639-642.

Chian et al teach a method for *in vitro* maturation (IVM) of immature human oocytes comprising the steps of inducing an increase in luteinizing hormone in a female human by administering human chorionic gonadotrophin (hCG), wherein the human has not undergone an ovarian stimulation protocol prior to the inducing step, next obtaining the immature oocyte from the human and culturing the oocyte to maturity, preferably reaching M-II. The patient is administered 10,000 IU of hCG prior to oocyte collection. The oocytes are cultured in TCM-199 medium, which is essentially free of any growth factors, transferrins, insulin, selenite and hydrocortisone, in the presence of an intact cumulus (see Case 1, p. 640 continued to discussion p.641).

Thus, the reference anticipates the claimed subject matter.

Claims 1,2 are rejected under 35 U.S.C. 102(b) as being anticipated by Chian et al , RBM Online, Aug. 2002.

Chian et al teach a method for *in vitro* maturation of immature human oocytes comprising the steps of inducing an increase in luteinizing hormone in a female human wherein the human has not undergone an ovarian stimulation protocol prior to the inducing step, next obtaining the immature oocyte from the human and culturing the

oocyte to maturity (see p.126, 1st full paragraph). They further teach that immature oocytes collected from unstimulated patients are improved by priming with hCG before oocyte retrieval (see p.129, first paragraph).

Thus, the reference anticipates the claimed subject matter.

Claims 1-6,26-33,38 are rejected under 35 U.S.C. 102(b) as being anticipated by Chian et al, Human Reproduction, vol. 16, p.1700-1702, 2001.

Chian et al teach a method for *in vitro* maturation (IVM) of immature human oocytes comprising the steps of inducing an increase in luteinizing hormone in a female human by administering human chorionic gonadotrophin (hCG), wherein the human has not undergone an ovarian stimulation protocol prior to the inducing step, next obtaining the immature oocyte from the human and culturing the oocyte to maturity, preferably reaching M-II. The patient is administered 10,000 IU of hCG prior to oocyte collection. The oocytes are cultured in TCM-199 medium, which is essentially free of any growth factors, transferrins, insulin, selenite and hydrocortisone, in the presence of an intact cumulus (see p. 1701,whole page).

Thus, the reference anticipates the claimed subject matter.

Claims 1-6,26-33,38 are rejected under 35 U.S.C. 102(b) as being anticipated by Chian et al, Human Reproduction, vol. 15, p. 165-170, 2000.

Chian et al teach a method for *in vitro* maturation (IVM) of immature human oocytes comprising the steps of inducing an increase in luteinizing hormone in a female

human by administering human chorionic gonadotrophin (hCG), wherein the human has not undergone an ovarian stimulation protocol prior to the inducing step, next obtaining the immature oocyte from the human and culturing the oocyte to maturity, preferably reaching M-II. The patient is administered 10,000 IU of hCG prior to oocyte collection. The oocytes are cultured in TCM-199 medium, which is essentially free of any growth factors, transferrins, insulin, selenite and hydrocortisone, in the presence of an intact cumulus (see p.166, Materials and Methods section).

Thus, the reference anticipates the claimed subject matter.

Claims 1,6,26-33;38 are rejected under 35 U.S.C. 102(b) as being anticipated by Barnes et al, Human Reproduction, 1995.

Barnes et al teach a method for *in vitro* maturation (IVM) of immature human oocytes comprising the steps of inducing an increase in luteinizing hormone in a female human wherein the human has not undergone an ovarian stimulation protocol prior to the inducing step, next obtaining the immature oocyte from the human and culturing the oocyte to maturity, preferably reaching M-II. The oocytes are cultured in TCM-199 medium, which is essentially free of any growth factors, transferrings, insulin, selenite and hydrocortisone, in the presence of an intact cumulus (see p.3244, Oocyte retrieval section).

Thus, the reference anticipates the claimed subject matter.

Claims 1-6,26-33,38 are rejected under 35 U.S.C. 102(b) as being anticipated by Moses (US 5882928).

Moses teaches a method for *in vitro* maturation (IVM) of immature human oocytes comprising the steps of inducing an increase in luteinizing hormone in a female human by administering human chorionic gonadotrophin (hCG), wherein the human has not undergone an ovarian stimulation protocol prior to the inducing step, next obtaining the immature oocyte from the human and culturing the oocyte to maturity. The patient is administered 10,000 IU of hCG prior to oocyte collection (see col.6 lines 1-53). The oocytes are cultured in TCM-199 medium, which is essentially free of any growth factors, transferrins, insulin, selenite and hydrocortisone, in the presence of an intact cumulus (see col.6 lines 6-20).

Thus, the reference anticipates the claimed subject matter.

Claims 1-6,26-33,38 are rejected under 35 U.S.C. 102(b) as being anticipated by Cha et al (Fertility and Sterility, 1991).

Cha teaches a method for *in vitro* maturation (IVM) of immature human oocytes comprising the steps of inducing an increase in luteinizing hormone in a female human, i.e collecting once they have seen a surge in LH in the female (p.112, first full paragraph), wherein the human has not undergone an ovarian stimulation protocol prior to the inducing step, next obtaining the immature oocyte from the human and culturing the oocyte to maturity. They also suggest that elevated LH *in vitro* may result in oocyte maturation before ovulation, thus obviating why one would administer LH to an IVM

patient (p.112, second paragraph). The oocytes are cultured in Ham's F-10 medium, which is essentially free of any growth factors, transferrins, insulin, selenite and hydrocortisone, in the presence of an intact cumulus (see p.110Oocyte maturation section).

Thus, the reference anticipates the claimed subject matter.

Claims 1,4-6,26-33,38 are rejected under 35 U.S.C. 102(b) as being anticipated by Brzyski et al (Assisted Reproduction, 1998).

Brzyski et al teach a method for *in vitro* maturation (IVM) of immature human oocytes comprising the steps of inducing an increase in luteinizing hormone in a female human wherein the human has not undergone an ovarian stimulation protocol prior to the inducing step, next obtaining the immature oocyte from the human and culturing the oocyte to maturity. The oocytes are cultured in TCM-199,Ham's F-10 medium, which is essentially free of any growth factors, transferrins, insulin, selenite and hydrocortisone, in the presence of an intact cumulus (see p.80, Human Studies section).

Thus, the reference anticipates the claimed subject matter.

Claims 1,4-6,26-33,38 are rejected under 35 U.S.C. 102(b) as being anticipated by Lindenberg et al (US 2002/0115211).

Lindenburg et al teach teach a method for *in vitro* maturation (IVM) of immature human oocytes comprising the steps of inducing an increase in luteinizing hormone in a female human wherein the human has not undergone an ovarian stimulation protocol

prior to the inducing step (0007), next obtaining the immature oocyte from the human and culturing the oocyte to maturity (0008-00012). The oocytes are cultured in a medium such as Medi-cult BBEM, preferably without insulin (0021), which is essentially free of any growth factors, transferrins, insulin, selenite and hydrocortisone, in the presence of an intact cumulus (0021,0057).

Thus, the reference anticipates the claimed subject matter.

Claims 1,4-6,26-33,38 are rejected under 35 U.S.C. 102(b) as being anticipated by Lindenberg et al (US 2001/0028878).

Lindenburg et al teach teach a method for *in vitro* maturation (IVM) of immature human oocytes comprising the steps of inducing an increase in luteinizing hormone in a female human wherein the human has not undergone an ovarian stimulation protocol prior to the inducing step (0005), next obtaining the immature oocyte from the human and culturing the oocyte to maturity (0006-0007). The oocytes are cultured in a medium such as Medi-cult BBEM, preferably without insulin (0015,0018,Tables 1-7), which is essentially free of any growth factors, transferrins, insulin, selenite and hydrocortisone, in the presence of an intact cumulus (0015,0018,Tables 1-7).

Thus, the reference anticipates the claimed subject matter.

Claims 1,4-6,26-33,38 are rejected under 35 U.S.C. 102(b) as being anticipated by Lindenberg et al (WO99/67365).

Lindenburg et al teach teach a method for *in vitro* maturation (IVM) of immature human oocytes comprising the steps of inducing an increase in luteinizing hormone in a female human wherein the human has not undergone an ovarian stimulation protocol prior to the inducing step (p.1-4), next obtaining the immature oocyte from the human and culturing the oocyte to maturity (p.1-4). The oocytes are cultured in a medium such as Medi-cult BBEM, preferably without insulin (p.6,lines 11-26), which is essentially free of any growth factors, transferrins, insulin, selenite and hydrocortisone, in the presence of an intact cumulus (p.6,lines 11-26,Tables 1-9).

Thus, the reference anticipates the claimed subject matter.

Claims 1-6,26-33,38 are rejected under 35 U.S.C. 102(a) as being anticipated by Child et al (Obstetrics and Gynecology, 2002).

Child et al teach a method for *in vitro* maturation (IVM) of immature human oocytes comprising the steps of inducing an increase in luteinizing hormone in a female human by administering human chorionic gonadotrophin (hCG), wherein the human has not undergone an ovarian stimulation protocol prior to the inducing step, next obtaining the immature oocyte from the human and culturing the oocyte to maturity. The patient is administered 10,000 IU of hCG prior to oocyte collection (see p.666 Materials and Method section, 4th paragraph). The oocytes are cultured in TCM-199 medium, which is essentially free of any growth factors, transferrins, insulin, selenite and hydrocortisone, in the presence of an intact cumulus (see p.666,7th paragraph).

Thus, the reference anticipates the claimed subject matter.

Claims 1,4-6,26-33,38 are rejected under 35 U.S.C. 102(b) as being anticipated by Cobo et al (Human Reproduction, 1999).

Cobo et al teach teach a method for *in vitro* maturation (IVM) of immature human oocytes comprising the steps of inducing an increase in luteinizing hormone in a female human wherein the human has not undergone an ovarian stimulation protocol prior to the inducing step (see Materials and Methods section) next obtaining the immature oocyte from the human and culturing the oocyte to maturity. The oocytes are cultured in M-199 medium which is essentially free of any growth factors, transferrins, insulin, selenite and hydrocortisone, in the presence of an intact cumulus (Materials and Methods section).

Thus, the reference anticipates the claimed subject matter

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-25 are rejected under 35 U.S.C. 103(a) as being obvious over Chian et al, (RBM Online, Aug. 2002)

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art

only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Chian et al teach a method for *in vitro* maturation (IVM) of immature human oocytes comprising the steps of inducing an increase in luteinizing hormone in a female human wherein the human has not undergone an ovarian stimulation protocol prior to the inducing step, next obtaining the immature oocyte from the human and culturing the oocyte to maturity (see p.126, 1st full paragraph). They teach that immature human oocytes can undergo maturation *in vitro* and that such maturation may be triggered by the administration of hCG prior to oocyte collection (see p.128, Discussion). Chian (2002) teaches immature oocytes at M-I, GV and M-II levels. They also teach an IVM method wherein the immature human oocyte is essentially free of cumulus cells cultured in a medium comprising the salts, amino acids, energy, sources, vitamins, hormones

and growth factors as claimed in claims 7-25 including those listed in Tables 1 and 2 (see p.126 IVM of immature oocytes,p. 127 Table 1, p.128-129 Discussion section), however, the female human has previously received ovarian stimulation. They teach however, that it would be ideal to avoid ovarian stimulation because of the known problems associated with hormonal stimulation of the ovaries such as costs, side effects, risks of OHSS, etc (see p.126 first full paragraph). Thus, an IVM method could be used to treat women eliminating hormonal stimulation and improving the maturational and developmental competence of cumulus-denuded immature oocytes (see p.126, 3rd full paragraph).

Chian does not teach the method and culture medium of IVM wherein the female has not undergone ovarian stimulation prior an inducing step. However, they do teach that such a method would be ideal and could be used thus eliminating the need for hormonal stimulation. Thus, at the time of the claimed invention, it would have been obvious to one of ordinary skill in the art to practice an IVM method wherein the female is not stimulated prior to obtaining oocytes from the female because it is suggested in the art that avoiding such stimulation would be ideal in IVM. Moreover, at the time of the claimed invention, one of ordinary skill in the art would have been motivated to eliminate ovarian stimulation in an IVM method with a reasonable expectation for successfully maturing such oocytes *in vitro* because the side effects, risks and costs are well known in the art to be undesirable to the female patient.

Claims 1-6,26-38 are rejected under 35 U.S.C. 103(a) as being obvious over Human Reproduction, vol. 16, p.1700-1702, 2001 or Chian et al, Fertility and Sterility,

1999, p.639-642 or Chian et al, Human Reproduction, vol. 15, p. 165-170, 2000 in view of Chian et al, RBM Online, Aug. 2002.

As discussed above Chian (HR,2001) and (F&S,1999) and HR (2000) teach a method for in vitro maturation (IVM) of immature human oocytes comprising the steps of inducing an increase in luteinizing hormone in a female human by administering human chorionic gonadotrophin (hCG), wherein the human has not undergone an ovarian stimulation protocol prior to the inducing step, next obtaining the immature oocyte from the human and culturing the oocyte to maturity, preferably reaching M-II. The patient is administered 10,000 IU of hCG prior to oocyte collection. The oocytes are cultured in TCM-199 medium, which is essentially free of any growth factors, transferring, insulin, selenite and hydrocortisone, in the presence of an intact cumulus.

Chian (2001 and 1999) do not teach the culture medium to comprise, consist or consist essentially of the ingredients as set forth in claims 34-37 as seen in Table 2 of applicant specification. However, they do teach culturing in TCM-199 medium which does comprise most salts, amino acids, vitamins and other components listed in Table 2, and they additionally supplement TCM-199 with FSH, LH and serum.

Chian (2002) teaches such ingredients in an IVM culture medium which has successfully been used to culture immature oocytes from a human patient. Although, the 2002 patient was stimulated prior to oocyte retrieval, Chian et al also teach that such method would be ideal if the patient did not receive prior ovarian stimulation. Thus, at the time of the claimed invention, it would have been obvious to one of ordinary skill in the art to practice an IVM method with the IVM culture medium taught by Chian

(2002) wherein the female is not stimulated prior to obtaining oocytes from the female because it is suggested in the art that avoiding such stimulation would be ideal in IVM. Moreover, at the time of the claimed invention, one of ordinary skill in the art would have been motivated to eliminate ovarian stimulation in an IVM method using such an IVM culture medium with a reasonable expectation for successfully maturing such oocytes *in vitro* because Chian (2002) teach such medium to be used in the successful maturation of immature oocytes, and that such method would be ideal if the patient did not recieive prior stimulation due the side effects, risks and costs which are well known in the art to be undesirable to the female patient.

Claims 1,4-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goud et al, Human Reproduction, 1998 in view of Chian et al , RBM Online, Aug. 2002.

Goud et al teach a method for in vitro maturation (IVM) of immature human oocytes. Gouds method does however teach prior ovarian stimulation. However, the teach obtaining the immature oocyte from the human and culturing the oocyte to maturity, preferably reaching M-II. The cumulus-intact and cumulus denuded oocytes are cultured in TCM-199 medium supplemented with EGF, FSH, albumin, penicillin, estrdiol, hCG, BSA, etc (see Materials and Methods section). They teach the importance of EGF in a culture medium used to mature cumulus-free/denuded oocytes. EGF is important in completing nuclear maturation in the medium (see p.1642, first full paragraph).

Goud does not teach an IVM method wherein the human female has not undergone ovarian stimulation nor a culture medium comprising all the ingredients listed in Table 1.

Chian et al teach a method for *in vitro* maturation (IVM) of immature human oocytes comprising the steps of inducing an increase in luteinizing hormone in a female human wherein the human has not undergone an ovarian stimulation protocol prior to the inducing step, next obtaining the immature oocyte from the human and culturing the oocyte to maturity (see p.126, 1st full paragraph). They teach that immature human oocytes can undergo maturation *in vitro* and that such maturation may be triggered by the administration of hCG prior to oocyte collection (see p.128, Discussion). Chian (2002) teaches immature oocytes at M-I, GV and M-II levels. They also teach an IVM method wherein the immature human oocyte is essentially free of cumulus cells cultured in a medium comprising the salts, amino acids, energy, sources, vitamins, hormones and growth factors as claimed in claims 7-25 including those listed in Tables 1 and 2 (see p.126 IVM of immature oocytes,p. 127 Table 1, p.128-129 Discussion section), however, the female human has previously received ovarian stimulation. They teach however, that it would be ideal to avoid ovarian stimulation because of the known problems associated with hormonal stimulation of the ovaries such as costs, side effects, risks of OHSS, etc (see p.126 first full paragraph). Thus, an IVM method could be used to treat women eliminating hormonal stimulation and improving the maturational and developmental competence of cumulus-denuded immature oocytes (see p.126, 3rd full paragraph).

Thus, at the time of the claimed invention, it would have been obvious to one of ordinary skill in the art to practice an IVM method with the IVM culture medium taught by Chian (2002) wherein the female is not stimulated prior to obtaining oocytes from the female because it is suggested in the art that avoiding such stimulation would be ideal in IVM. Further, although the ingredients of TCM-119 medium is known in the art, it does not contain all the ingredients listed in Table 1.However, Chian teaches such ingredients to be beneficial in the maturation of immature oocytes. At the time of the claimed invention, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to combine the instant components/ingredients for their known use and benefit, as disclosed by the cited references above, since each is well known in the art for their claimed purpose. Moreover, at the time of the claimed invention, one of ordinary skill in the art would have been motivated to combine the instant components/ingredients together in a culture medium to mature oocytes. This rejection is based upon the well established proposition of patent law that no invention resides in combining old ingredients of known properties or function where the results obtained thereby are no more than the additive effects of the ingredients/components, *In re Sussman*, 1943 C.D. 518. It is well known that it is *prima facie* obvious to combine two or more ingredients each of which is taught by the prior art to be useful for the same purpose in order to form a third composition which is useful for the same purpose. The idea for combining them flows logically from their having been used individually in the prior art. *In re Pinten*, 459 F.2d 1053, 173 USPQ 801 (CCPA 1972); *In re Susi*, 58 CCPA 1074, 1079-80; 440 F.2d 442, 445; 169 USPQ 423, 426 (1971); *In re Crockett*,

47 CCPA 1018, 1020-21; 279 F.2d 274, 276-277; 126 USPQ 186, 188 (1960). Thus, the invention as a whole is prima facie obvious over the references, especially in the absence of evidence to the contrary.

Moreover, at the time of the claimed invention, one of ordinary skill in the art would have been motivated to eliminate ovarian stimulation in an IVM method using such an IVM culture medium with a reasonable expectation for successfully maturing such oocytes *in vitro* because Chian (2002) teach such medium to be used in the successful maturation of immature oocytes, and that such method would be ideal if the patient did not recieive prior stimulation due the side effects, risks and costs which are well known in the art to be undesirable to the female patient.

Conclusion

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tiffany M. Gough whose telephone number is 571-272-0697. The examiner can normally be reached on M-F 8-5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon Weber can be reached on 571-272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

***

/Ruth A Davis/
Primary Examiner, AU 1651